SAF-RC-001 Industrial Hygiene Sampling FINAL DATA

NO DISTRIBUTION REQUIRED

COMMENTS:

SDG <u>06I-0180-02</u> SAF-RC-001

Rad only X Chem only Rad & Chem

X Complete

Partial

300 Area 303M Bldg







Cover Page

Report Identification Number: 06I-0180-02

Subcontract Number: 0000X-BO-G0058-B-Mod#4

Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby

Laboratory Identification Number: DCHM

SAF#: RC-001 / R303M0 J451

Payroll#: 73513



Web Page: www.datachem.com

E-mail: lab@datachem.com

Sample Information

| Sample Date | Customer Sample Number | Laboratory Sample Number | Method | Analytical Batch Identification | Sample Matrix |
|-------------|------------------------------|--------------------------------|------------|---------------------------------------|---------------|
| 17 Jan 2006 | J10RH7 | 06I01512 | NMAM 7300M | G060K00K | G WIPE |
| 17 Jan 2006 | J10RH8 | 06I01513 | NMAM 7300M | G060K00K | G WIPE |
| 17 Jan 2006 | J10RH9 | 06I01514 | NMAM 7300M | G060K00K | G WIPE |

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FAX: (801) 268-9992

Name: Lisa M. Reid Title: Chemist

Date: January 19, 2006





Case Narrative Page

Report Identification Number: 06I-0180-02

Subcontract Number: 0000X-BO-G0058-B-Mod#4

Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby

Laboratory Identification Number: DCHM

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General Set Information: There are 4 samples in set 06I-0164-01, 3 samples in set 06I-0180-02 and 3 samples in set 06I-0181-02. The samples were analyzed for cadmium, lead and beryllium on Ghost Wipe. No problems were encountered with the receipt of these samples and no contact with the CTR was required.

Method Summary: Samples were transferred to 50 ml centrifuge tubes and digested in the presence of 5 mL of nitric acid and 5 mL of ASTM Type II water. Samples were digested in a hot block set at 110°C for 60 minutes. Samples were then diluted to a 25 mL volume with ASTM Type II Water. Samples were shaken and delivered for ICP analysis.

Sample Preparation: All samples were prepared in accordance with DCL SOP "IH-AN-021" and NIOSH method NMAM 7300 modified for hot block digestion.

Holding Times: The holding times were met for both sample preparation and analysis.

<u>Instrument Calibration</u>: Instrument calibration was performed in accordance with NIOSH method NMAM 7300.

Initial and Continuing Calibration Verification Analysis: Beryllium, cadmium and lead recoveries in all Initial Calibration Verification (ICV) and Continuing Calibration Verification (CCV) samples are within the quality control limits of +/- 10%.

Initial and Continuing Calibration Blank Analysis: No beryllium results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 0.01 ug/sample. No cadmium results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 0.07 ug/sample. No lead results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 2. ug/sample.

Method Blank Analysis: No beryllium, cadmium or lead was found in any of the media blank samples above the Contract Required Detection Limit (CRDL).

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Dilution(s): None.





Case Narrative Page

Laboratory Control Sample and Duplicate Analysis: Two Laboratory Control Samples (LCSs) and two Laboratory Control Sample Duplicates (LCSDs) were prepared and analyzed with the sample batch. The LCS results were within the control limits of +/- 20%. The Relative Percent Difference (RPD) between the LCS and the LCSD were within the control limit of 20%.

Replicate Analysis: One sample in this batch was replicated. The RPD between the samples and the replicates was within the control limit of 20%. If the result of the sample or replicate is below the CRDL, replicate analysis is negligible.

Flagging Codes: None

Nonconformance/Corrective Action Report (NC/CAR): N/A

Sample Calculation: The final results are calculated by the following equation:

Final result for aqueous samples (μ g/sample) = (A) x (B) x (C)

Where:

A = Analyte concentration from instrument determination ($\mu g/L$)

B = Concentration factor from sample preparation

= Final Volume of Digestate (L)

Sample

C = Dilution performed at time of analysis

Example Calculation: $(1 \mu g/L) \times (0.025 L/sample) \times (1) = 0.025 \mu g/sample$

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Miscellaneous Comments: None



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Report Page

Report Identification Number: 06I-0180-02

Subcontract Number: 0000X-BO-G0058-B-Mod#4

Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby

Laboratory Identification Number: DCHM

SAF#: RC-001 / R303M0 J451

Payroll#: 73513

| Customer Sample Number | Laboratory Sample Number | Date Analyzed | Berylliun µg/sampl | | Cadmiun µg/sampl | | Lead μg/sample | e |
|------------------------|--------------------------------|------------------|-----------------------|----|---------------------|----|-------------------|---|
| J10RH7 | 06I01512 | 18 Jan 2006 | < 0.01 | U | < 0.07 | U | <2. | U |
| J10RH8 | 06I01513 | 18 Jan 2006 | < 0.01 | U | < 0.07 | U | <2. | U |
| J10RH9 | 06I01514 | 18 Jan 2006 | < 0.01 | U | < 0.07 | U | <2. | U |
| | 0. | 01 | 0. | 07 | | 2. | | |
| R | equired Detecti | on Limit (RDL) | | | | | | |

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U - Parameter not detected above LOD.

J - Parameter between LOD and RDL.





QC Summary Page

Report Identification Number: 06I-0180-02

Subcontract Number: 0000X-BO-G0058-B-Mod#4

Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby

Laboratory Identification Number: DCHM

SAF: RC-001 / R303M0 J451

Payroll#: 73513

Batch ID: G060K00K

| | | | | • | _ | | | Relative |
|--------------|------|-----------|-----------|--------|--------|----------|---------|----------|
| | QC | | | - | Parent | . | Percent | Percent |
| QC Sample ID | Type | Analyte | Units | Result | Result | Target | Rec. | Diff. |
| BL-240171-1 | MB | Beryllium | μg/sample | ND | NA | NA | NA | NA |
| BL-240171-1 | MB | Cadmium | μg/sample | ND | NA | NA | NA | NA |
| BL-240171-1 | MB | Lead | μg/sample | ND | NA | NA | NA | NA |
| QC-240171-1 | LCS | Beryllium | μg/sample | 10.8 | NA | 10.0 | 108. | NA |
| QC-240171-1 | LCS | Cadmium | μg/sample | 32.4 | NA | 30.0 | 108. | NA |
| QC-240171-1 | LCS | Lead | μg/sample | 102. | NA | 100. | 102. | NA |
| QD-240171-1 | LCSD | Beryllium | μg/sample | 10.8 | 10.8 | 10.0 | 108. | 0.483 |
| QD-240171-1 | LCSD | Cadmium | μg/sample | 32.2 | 32.4 | 30.0 | 107. | 0.718 |
| QD-240171-1 | LCSD | Lead | μg/sample | 102. | 102. | 100. | 102. | 0.496 |

MB - Method Blank

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MSD - Matrix Spike Duplicate

LD - Laboratory Duplicate

NA - Not Applicable

ND - Parameter not detected above LOD

LCS, LCSD Percent Rec. = (Result / Target) * 100.0

MS, MSD Percent Rec. = ((Result – Parent) / Target) * 100.0

LCS, LCSD Relative Percent Diff. = ((|LCS - LCSD|)/((LCS + LCSD)/2.0)) * 100.

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MS, MSD Relative Percent Diff. = ((|MS - MSD|) / ((MS + MSD)/2.0)) * 100.

LD Relative Percent Diff. = ((|Parent - LD|) / ((Parent + LD)/2.0)) * 100

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|--|----------|--------------------------|------------------------|-----------------|-----------------------------|------------------|----------------------|-------------------|---------|-----------------|------------|----------------|-----|
| | | | CHAIN (| OF CUSTODYA | SAMPLE | ANALY | SIS RE | EQUEST | | | - | | |
| Collector: Company Contact Denuse A. Pitts and Henry W. Ruby | | | luby | | | | | hator T | | Data Turnaround | | | |
| Payroll#: | | Sampling A | | All relevant (| STRUCTIONS OAs mass be p | rovided: | | SAF No. RC-001 | | | 24 hour | | ur_ |
| Type of Sample: | wysia | / | Builder | 9 | MD J4 METHOD (S | | | Method of Ship | ع لم | _خے | | | |
| Shipped To: Che Salt Salt | L City | Other | de Media: SYes □ No | NIOST | 7300 |) | | Bill of Lading/ | | 331 | 53: | 30 | |
| POSSIBLE SAMPLE HAZARD/RUMARKS BL. Fb. C. A Special Handling and/or Storage WI X | | A - All WI - WI | R Pro | required, etc.) | No | No | No | No | No | No | No | No | na |
| SAMPLE NO. | MATRIX | SAMPLE ANALY SAMPLE DATE | VOLUME (L) or Area cm² | Comments | Asbestos Azborne | Lead Airborne | Beryllini Airboro | | Mold | Lead Wipe | Cd Wipe | Cd Airborne | na |
| PMYOIL | Α | 1-17-06 | 304L | personal | na | X | X | W | 619 | 18 | | X | na |
| 710Y NO. | A | 1-17-04- | NA | Blank | , na | × | × | | 14 | 109 | | 1 | ne |
| JIOYNI | <u> </u> | 1-17-06 | NA | Blank | na | x | × | | 1-17-06 | 12 | | X | na |
| JIONNZ | 4 | 1-17-06 | 94L | personal | na | * | > | | - | J 4) | | × | na |
| JIORHT | wı | 1-17-06 | NA | Blank | Q | <u> </u> | 5/2 | X | na | X | X | 142 | |
| JORH8 | wl. | 1-17-06 | NA | Blank | 1-17-06 | 104 | 13 | K | na_ | X | X | 147-06 | |
| JORH9 | wı | 1-17-06 | 100cm² | NA | <u> </u> | | 14 | -x- | na | * | K | | |
| | | | | Wj. | | | | | | | | | ļ |
| | | | | 1-17-04 | | | | | | | | | |
| | | | | | | | | | | | | | |
| WCH-SH-202 (08/25 | 9/2005) | | | | | | | , | | Page _/ | or 2 | · | · |

COC Page

| Enter on line below the first Sam | nple Number from Page One: | | | · · | | | | |
|-----------------------------------|--|----------------------|---------------------------------|----------|--|--|--|--|
| | CHAIN OF CUSTODY | SAMPLE ANALYSIS REQ | UEST | ح استواق | | | | |
| | SIGN / PRINT NAMES / USE MILITARY TIME | | | | | | | |
| What I wan | Vetta D. Jones 1-17-06 14 | 120 3746 Building Rm | 16, locked cabinet 1-17-06 1420 | E | | | | |

| l | CHAIN OF COSTODIORE | H DISTRICTED REQUEST | |
|---------------------------|---------------------------------|---|--------------------------------|
| | | / USE MILITARY TIME | |
| 18thal | 100 Vetta D. Jones 1-17-06 1420 | Remove By Shapet 3746 Building, Rom/k, locked Register By Shapet | Cabinet 1-17-06 1420 |
| Catholine Catholine | Galdie Malhan 01/17/06 1445 | RZ Stefflir R.Z. S. | 1111 1-17-06 1445 DATE/TORE |
| RZ Steff/ | A. 7. Stepl WE H 1-17-06 1530 | Fed Ex | DATE / TIME |
| Fullex | | Meredil Edus | Barol / 945 |
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| R. inspiritual British.cl | Dige / Take | Reacted BySamul | DATE : TIME |
| <u>Каничила Вубнесы</u> | DATE / Tible | Realized BySharek | . ВАЛЕСТЫМЯ |
| Retunquished By Stonesi. | DATE/TME | Reserved By Servei. | DATE-FIME |
| Retingential BuSterial | DATE/TIME | Rovinel BySurest | PATE FITML |
| Retunqui deil ByrSn qui | DATE/TIME | Resmod BySaret | OATE / TIME |
| LABORATORY SECTION | Respect By Title | | DATE/TIME Speake/94 |
| REVIEWED BY: | PRINT/SIGN NAME | DATE: | |
| | TOTAL POPULATION | | |

WCH-SH-202 (08/29/2005)

Page 2 of 2



| | | | CHAIN (| OF CUSTODY/S | AMPLE | ANALY | SIS RI | EQUEST | | | | | |
|--|--|--------------|---------------------------------------|--|--|-----------------------|-------------------|--|---------|-------------|-------------|-------------------------------------|----|
| Collector: | ector: Company Contact Petto D Jones Denise A. Pitts and Henry W. Ruby | | | Telephone No. Project Coordinator 531-1229 Joan H. Kessner | | | | Data Turnaround | | | | | |
| Payroll#: | Sampling Location SPECIAL INST | | | STRUCTIONS SAF No COAs must be provided: RC-001 | | | SAF No. RC-001 | <u> </u> | | 24 hour | | | |
| Type of Sample: | • | SORM | Builder | g_ R3031 | 40 J4 | D J451 Method of Ship | | | | <u> </u> | | · · · · · · · · · · · · · · · · · · | |
| Shipped To: Che Salt Hate | m | Wipe Samp | le Media: LYes | O | NALYSIS METHOD (SPECIFIC): NIOSH 7300 Bill | | | ## ## ## ## ## ## ## ## ## ## ## ## ## | | | 300 | | Y |
| POSSIBLE SAMPLE HAZARD/REMARKS BL. P. MATRIX A - AIR Special Handling and/or Storage WI - WIPE X - OTHER Preservation (i.e., cooling required, etc.) | | | No | No | No | No | No | No | No | No | na | | |
| | | SAMPLE ANALY | sis | | Asbestos | Lead | Beryllius | n Beryllium | | Lead | Cq | Cd | |
| SAMPLE NO. | MATRIX | SAMPLE DATE | VOLUME (L) or Area cm ² | Comments | Airborne | Airbome | Airborn | | Mold | Wipe | Wipe | Airbome | na |
| JIOY M9 | Ą | 1-17-06 | 304L | personal | na | X | X | | | | | X | na |
| JIOY ND | A | 1-17-04 | NA | Blank | na | × | × | | 4 | · | | 1 | na |
| JIOYNI | Ą | 1-17-06 | NA | Blank_ | na | × | × | | 1-17-06 | | | × | na |
| J107 45 | Ą | 1-17-0L | 94L | personal) | na | × | > | | | | | × | na |
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| JORH8 | w _l | 1-17-06 | NA | Blank | 1-1-7-DE | 4 | | K | na | X | X | 147-06 | |
| JIORH9 | سکر | 1-17-06 | 100cm² | NA | | · | | | na | · 🗡 | K | | |
| | | | | this way | | | | X | | | | | |
| | | | | 1-17-04 | | | | | FIELI | SAM | PLE (| OPY | |
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| JIOYM9 | _ |
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| | (| CHAIN OF CUSTODY/SA | MPLE ANALYSIS | REQUEST | |
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| | | SIGN / PRINT NAME | S / USE MILITARY TIN | ME | |
| Relinquishas/By/Stored; | 5 | DAYE! TIME | Received By/Sured: | DATE/TIME | |
| 1/Hall | my Vetta D. | Jones 1-17-06 1420 | 3746 Building | Rm/6, locked cabinet 1-17-06 14= | _{දුට} |
| 3746 building | Rm 416 locked ca | DATE / TIME | Reactive of By/Sterrets | Rm/k, locked cabinet 1-17-06 14= | /V~ |
| Colon 140 | Goldie Malhan | 01/17/06 1445 | 1 LC 5/279/11 | DAIE/TIME | <u> </u> |
| RZ Steffle | - R. 2. Steple | wett 1-17-06 1530 | 1 / / | | |
| Rehnquished By/Shwest | | DATE / TIME | Received By (Shirted) | | |
| Reimont died By/Sheed | | DATE / TIME | Received By/Streed: | DATE / TIME | - |
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| | | PRINT/SIGN NAME | | | |